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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STUART SERKIN

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26161

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EXAMINER

MILEF, ELDA G

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/404,518	<b>Applicant(s)</b> SERKIN ET AL.	
	<b>Examiner</b> Elda Milef	<b>Art Unit</b> 3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-14 and 16-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

It is noted that in view of the decision rendered by the Board of Patent Appeals and Interferences on November 8, 2007, prosecution is hereby reopened.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1, 3-14, 16-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 3-10 recite only a mental process of matching without integrating a machine, or constituting a process of manufacture, or the altering a composition of matter.

"Following the lead of the Supreme Court, this court and our predecessor court have refused to find processes patentable when they merely claimed a mental process standing alone and untied to another category of statutory subject matter even when a practical application is claimed." *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).

Claims 11-14, 16 and 17 recite a "system" in the preamble, however the body of the claims recite only a mental process of matching. "the patent statute does not allow patents on particular systems that depend for their operation on human intelligence alone..." *In re Comiskey*, 499 F.3d 1365 (Fed. Cir. 2007).

Claims 18-20 constitute unpatentable subject matter under 35 U.S.C. 101 because no physical medium is recited in these claims onto which the instructions are captured in tangible form. In this case, the applicant is claiming a "computer program product", which in its broadest reasonable interpretation could be read as a signal. A signal under the holding of *Nuijten* (*In re Nuijten*, 500 F.3d 1346, 84 USPQ2d 1495 (Fed. Cir. 2007)), is a transitory item and is not considered statutory subject matter. Furthermore, a claim to software, program, code not clearly on any medium is therefore considered not pertaining to one of the statutory classes of method, apparatus, article of manufacture, or composition of matter)physical things.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

2. Claims 1, 3, 6-12, 14, 17, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tilfors et al. (hereinafter Tilfors, U.S. Patent No. 6,405,180).

**Re claim 1:** Tilfors disclose:

A method of executing an order in a market system (col. 1, lines 14-19), comprising:

receiving an order from a customer of a market participant  
(Fig. 1 and col.4 lines 6-15);

for the order, checking if a market participant  
identification associated with the order from the customer  
matches a market participant identification representing a quote  
in the system which is at the best bid or best offer price in  
the system( Tilfors checks the market participant identification  
associated with the order as being one of a customer, a firm or  
another market maker. Col. 4, lines 15-17));

and if the market participant identification matches the  
market participant identification representing a best bid or  
offer quote in the system,

matching off the customer order against the one of the best  
bid or best offer quote of the matching market participant  
identification that is at the opposite side of the market  
irrespective of any other priority established for matching  
orders in the system (Tilfors discloses using different types of  
trading procedures based on the types of counterpart being  
matched (col. 4, lines 18-26) all the while insuring that the  
quote in the system being used is at a best bid or best  
offer(col. 4 lines 37-45)). Tilfors provide for a procedure for  
executing a trade for matching prices between two market makers

(col. 5 lines 55-67, col. 6 lines 1-14). Furthermore, it is obvious that Tilfors matches off the customer order against the one of the best bid or best offer quote of the matching market participant identification that is opposite irrespective of any other priority established for matching orders in the system because Tilfors discloses "it is desired that the spread be smaller than it is today, without forcing the market makers to take the risk of making undesired matches" (see cols. 1-2).

**Re claim 3:** Tilfors discloses:

wherein matching-off the order without regard to any priority is with respect to a time priority of other quotes in the system, at the opposite side of the market to the customer order -see col. 1. Tilfors discloses that in existing exchange systems, a simple first in first served model [time priority] in matching is commonly used. The first in first served model forces the market makers to take the risk of making undesired matches because of the requirement by the exchange for market makers to enter two way quotes. Tilfors provides a method of matching based on different or type of counterpart, as well as parameters specified by the market maker -see col. 2.

**Re claims 6, 7:** Tilfors disclose:

routing the order to a market participant corresponding to said market participant that has the one of the best bid or best offer that is at the opposite side of the market; wherein the customer order is checked against proprietary quotes and agency quotes of a market participant identification representing a quote in the system which is at the best bid or offer-see cols. 1-6.

**Re claim 8:** Tilfors disclose:

receiving the internal book of the market participant to match-off against the market participant's posted agency or proprietary quotes-see ("order book") col. 4 lines 37-45, col. 5 line 22 to col. 6 line 44.

**Re claim 9:** Tilfors disclose:

wherein receiving a customer order further comprises:  
receiving the order via an order execution system -see FIG. 1;  
col. 3 line 47 to col. 4.

**Re claim 10:** Tilfors disclose:

receiving the order via a negotiation order entry system -  
see col. 1, col. 4 lines 37-45; col. 5 line 55-col. 6 line 34;  
FIGs. 1-4.

**Re claim 11:** Tilfors disclose a system and an order execution process that receives orders and matches orders



against quotes posted in the system on a time priority basis-see ("In existing automated exchange systems for continuous trading (dealer market), a simple first in first served model in the matching is commonly used.")-see col. 1 in particular, lines 15-17;

Further Tilfors, disclose similar limitations found in the remaining claim as in claim 1 above and is rejected using the same art and rationale.

**Re claim 12:** Tilfors disclose execute the order against the one of the best bid or best offer that is at the opposite side of the market.-see col. 1; col. 2 lines 51-52; col. 4 lines 36-45.

**Claims 14 and 17** have similar limitations found in claim 6 above, and therefore are rejected by the same art and rationale.

**Re claims 18, 20:** Further a computer program product would have been necessary to perform the method of previously rejected claims 11, 14 and are therefore rejected using the same art and rationale.

4. Claims 4, 5, 13, 16, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tilfors in view of May (U.S. Patent No. 6,421,653).

**Re claims 4 and 5:** Although Tilfors disclose "quotes that may result in a trade between market makers are hidden for some time before being matched, thus giving the market makers a chance to back off")-see col. 2 lines 10-13, Tilfors do not explicitly disclose calling a cancel request to cancel a quote at the side of the market in which a matched off order will be executed. May however teaches ("The present invention provides at least three order management functions to facilitate the canceling or temporarily suspending the order...")-see col. 35, lines 41-55. It would have been obvious at the time that the invention was made to modify Tilfors to explicitly disclose canceling an order as taught by May in order to cancel a trade quickly due to adverse market changes.

**Claims 13 and 16** have similar limitations found in claims 4 and 5 above, and therefore are rejected by the same art and rationale.

**Re claim 19:** Further a computer program product would have been necessary to perform the method of previously rejected

claim 13 and is therefore rejected using the same art and rationale.

**Conclusion**


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday -Thursday 8:30 am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Elda Milef  
Examiner  
Art Unit 3692

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KAMBIZ ABDI  
SUPERVISORY PATENT EXAMINER